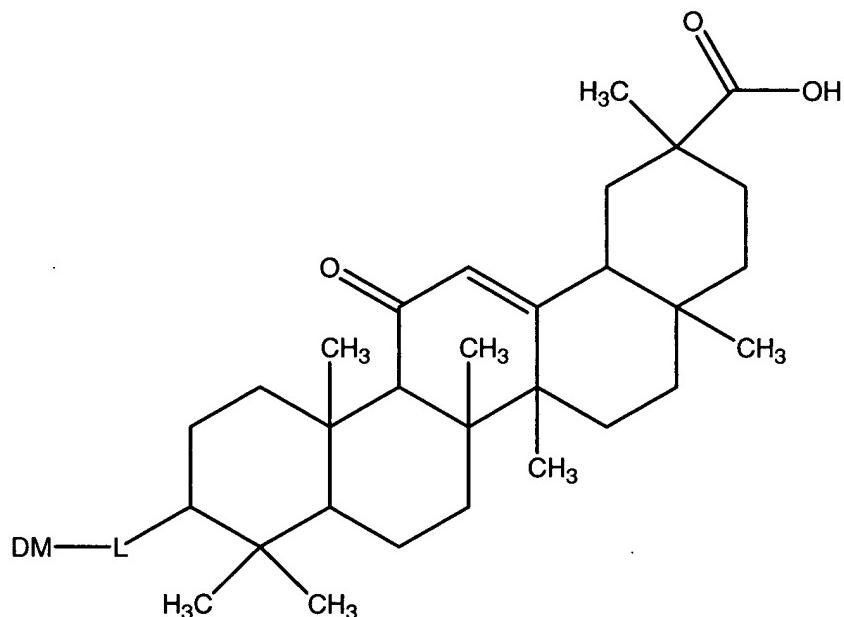


What is claimed is:

1. A probe comprising:

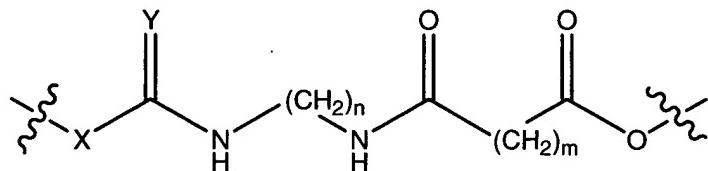


wherein

DM is a detectable marker; and

L is a straight or branched chain moiety providing between 1 and 20 atom separation between DM and the ring atom to which DM is attached.

2. A probe according to claim 1 wherein L comprises the formula:



wherein:

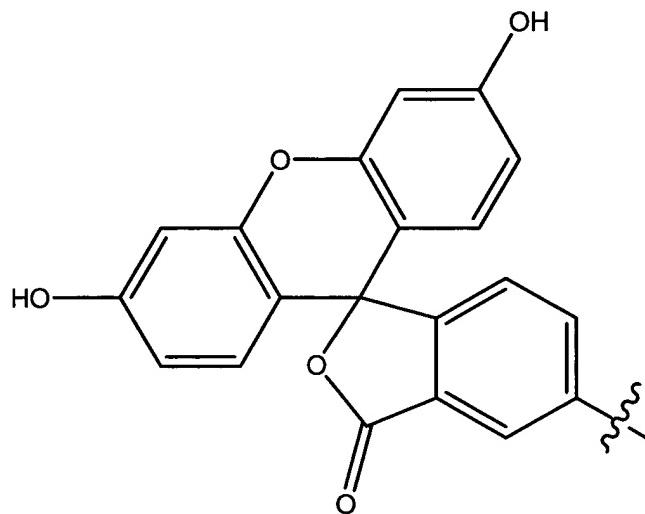
X is selected from the group consisting of NH and a single bond;

Y is selected from the group consisting of S or O;

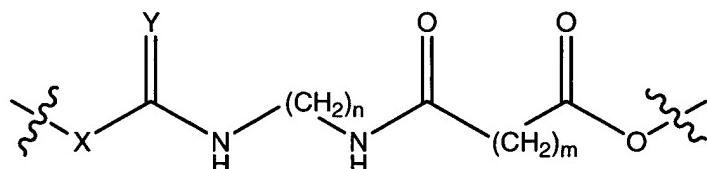
m is  $\geq 2$ ; and

n is  $\geq 2$ .

3. A probe according to claim 2 wherein DM is a fluorescent detectable marker.
4. A probe according to claim 2 wherein DM comprises the formula



5. A probe according to claim 1 wherein L comprises the formula:



wherein:

X is selected from the group consisting of NH and a single bond;

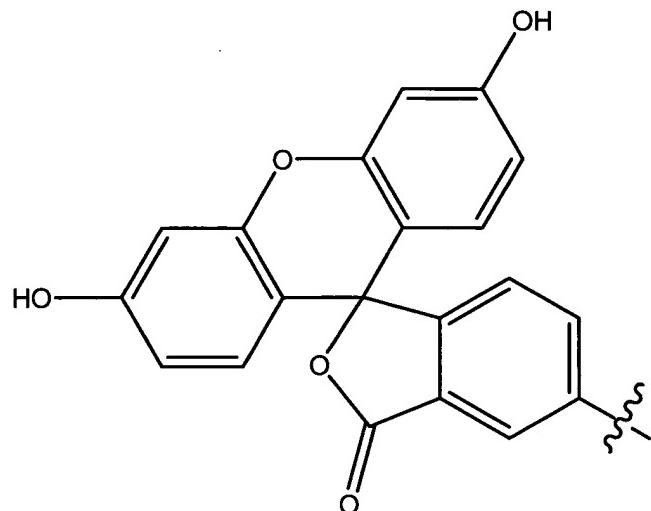
Y is selected from the group consisting of S or O;

m is 2 or 3; and

n is 2, 3, 4, 5, or 6.

6. A probe according to claim 5 wherein DM is a fluorescent detectable marker.

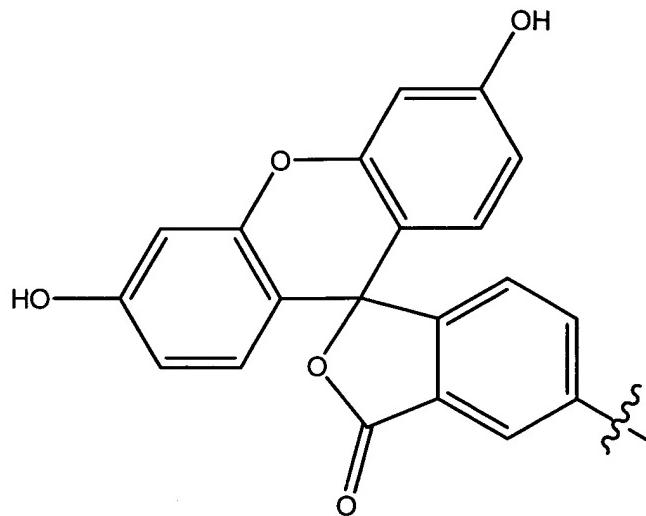
7. A probe according to claim 5 wherein DM comprises the formula



8. A probe according to claim 1 wherein DM is a detectable marker selected from the group consisting of photoreactive groups; fluorescent labels; chemiluminescent labels; colorimetric labels; enzymatic markers; radioactive isotopes; biotin-streptavidin; digoxigenin haptens; and electron-dense reagents.

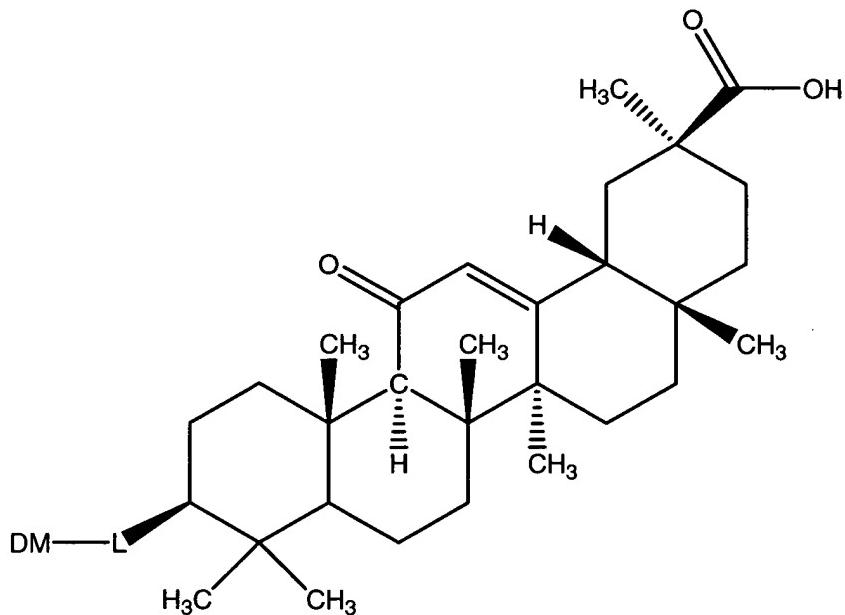
9. A probe according to claim 1 wherein DM is a fluorescent detectable marker.

10. A probe according to claim 1 wherein DM comprises the formula:



and wherein the probe is attached to a solid support.

11. A probe comprising:

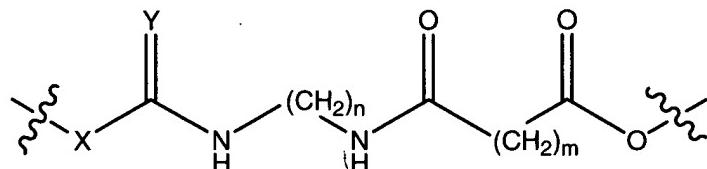


wherein

DM is a detectable marker; and

L is a straight or branched chain moiety providing between 1 and 20 atom separation between DM and the ring atom to which DM is attached.

12. A probe according to claim 11 wherein L comprises the formula:



wherein:

X is selected from the group consisting of NH and a single bond;

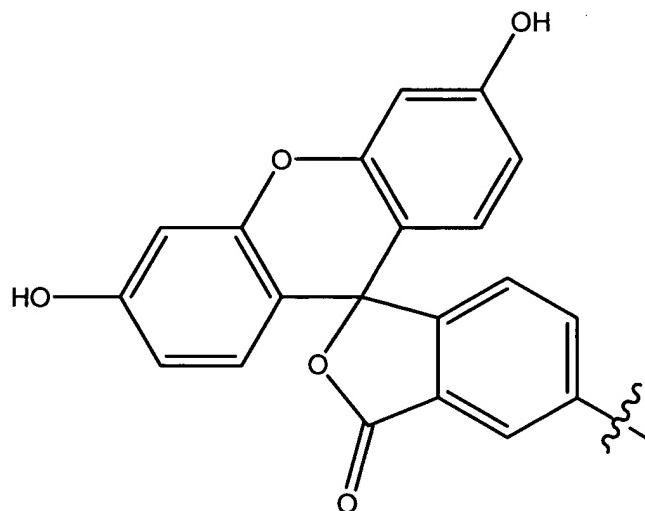
Y is selected from the group consisting of S or O;

m is  $\geq 2$ ; and

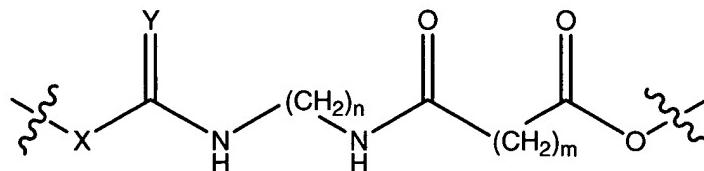
n is  $\geq 2$ .

13. A probe according to claim 12 wherein DM is a fluorescent detectable marker.

14. A probe according to claim 12 wherein DM comprises the formula:



15. A probe according to claim 11 wherein L comprises the formula:



wherein:

X is selected from the group consisting of NH and a single bond;

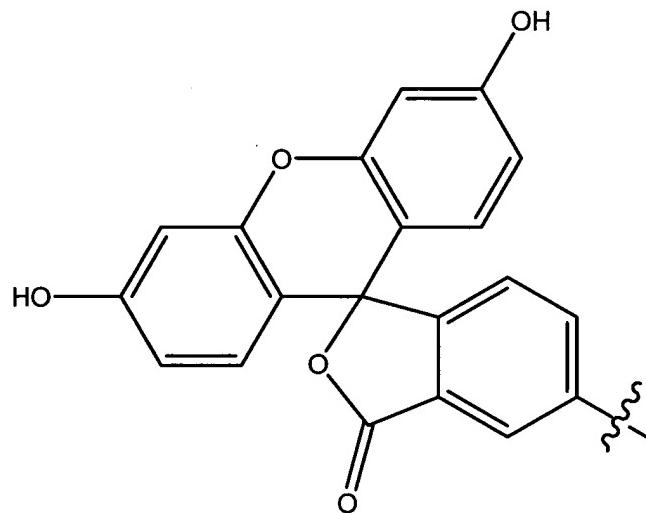
Y is selected from the group consisting of S or O;

m is 2 or 3; and

n is 2, 3, 4, 5, or 6.

16. A probe according to claim 15 wherein DM is a fluorescent detectable marker.

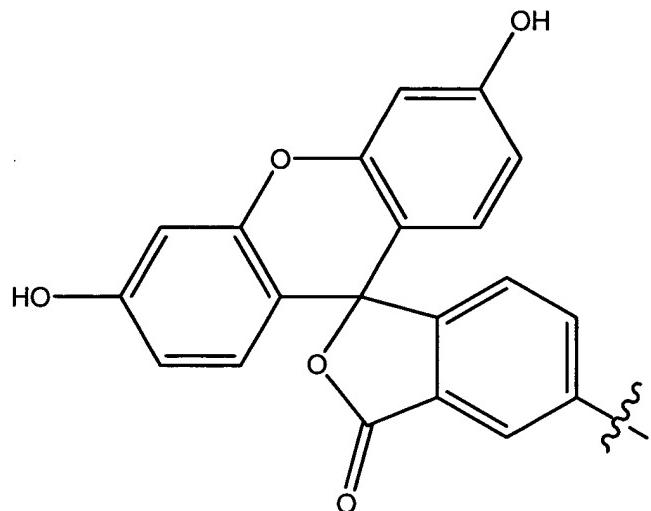
17. A probe according to claim 15 wherein DM comprises the formula:



18. A probe according to claim 11 wherein DM is a detectable marker selected from the group consisting of photoreactive groups; fluorescent labels; chemiluminescent labels;

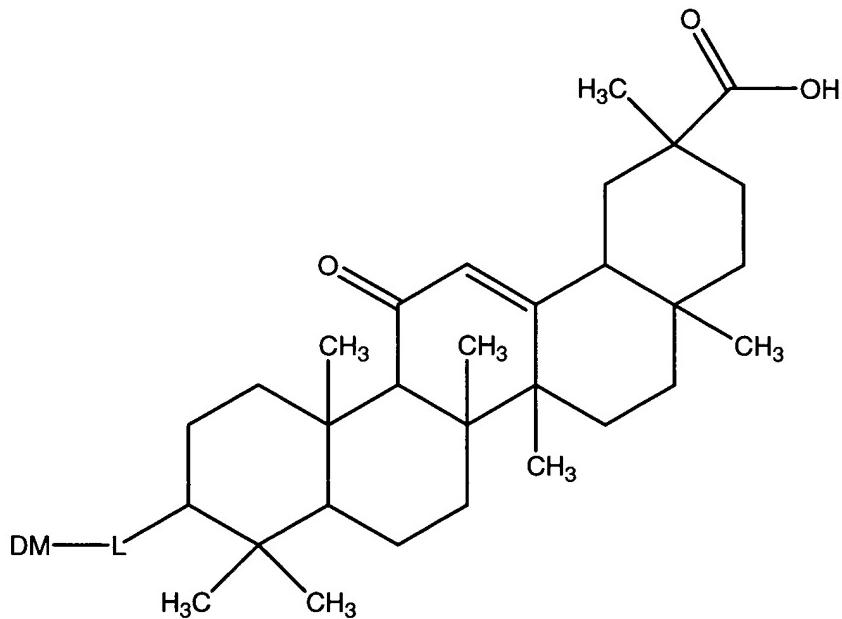
colorimetric labels; enzymatic markers; radioactive isotopes; biotin-streptavidin; digoxigenin haptens; and electron-dense reagents.

19. A probe according to claim 11 wherein DM is a fluorescent detectable marker.
20. A probe according to claim 11 wherein DM comprises the formula:



and wherein the probe is attached to a solid support.

21. A composition comprising:  
a probe immobilized on a solid support where the probe comprises the formula:



wherein

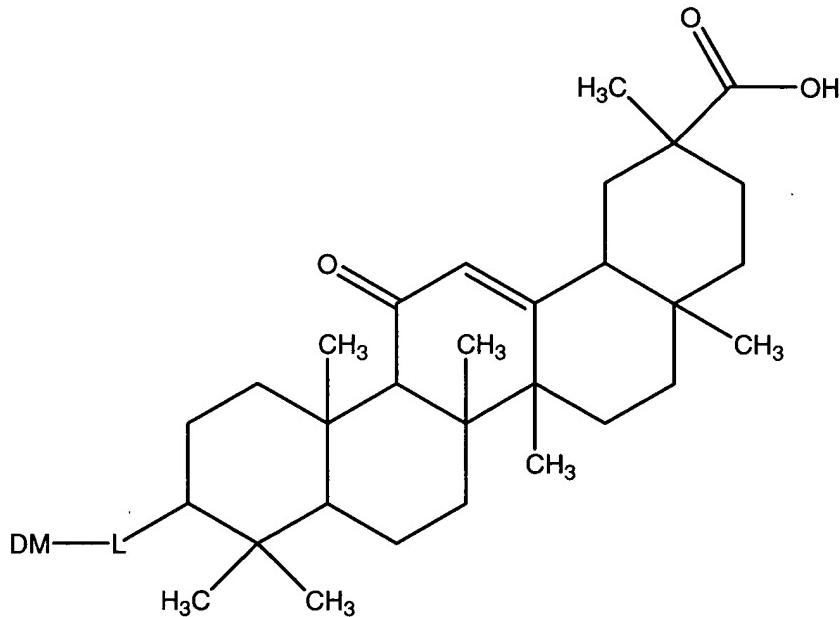
DM is a detectable marker; and

L is a straight or branched chain moiety providing between 1 and 20 atom separation between DM and the ring atom to which DM is attached.

22. A method comprising:

contacting a probe with a target protein to which the probe is capable of binding; and  
detecting the probe;

wherein the probe comprises the formula:



wherein

DM is a detectable marker; and

L is a straight or branched chain moiety providing between 1 and 20 atom separation between DM and the ring atom to which DM is attached.

23. A method according to claim 22 wherein detecting the probe comprises detecting a probe - target protein complex.

24. A method according to claim 22 wherein detecting the probe is performed without having to perform a separate step to remove probe that is not bound to the target protein.

25. A method according to claim 22 wherein detecting the probe is performed with the probe and the target protein both in solution.

26. A method according to claim 22 wherein the detectable marker is a fluorescent label.

27. A method according to claim 22 wherein detecting the probe is performed by fluorescence polarization.

28. A method according to claim 22 wherein the target protein is attached to a solid support.

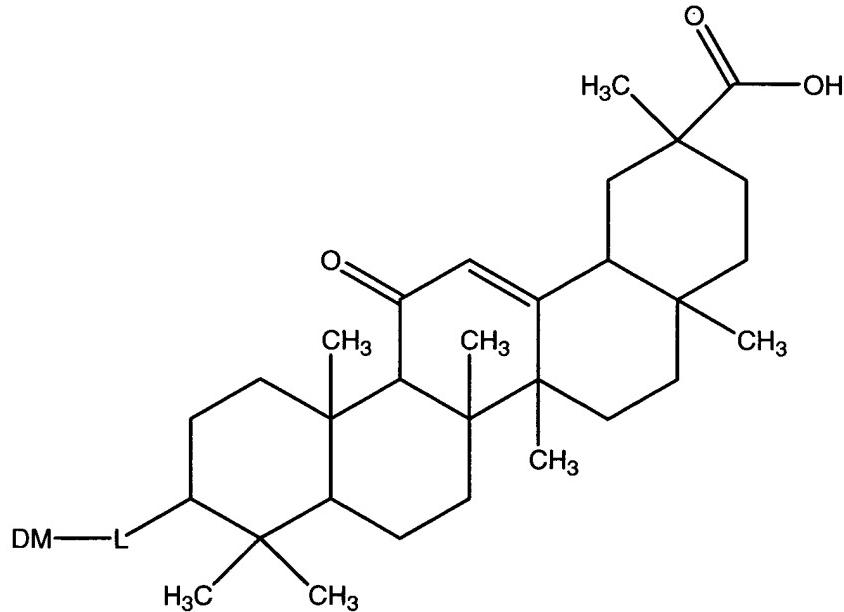
29. A method according to claim 22 wherein the target protein is 11 $\beta$ -hydroxysteroid dehydrogenase.

30. A method comprising:

contacting a target protein with one or more test compounds in the presence of a probe;  
and

detecting the probe;

wherein the probe comprises the formula:



wherein

DM is a detectable marker; and

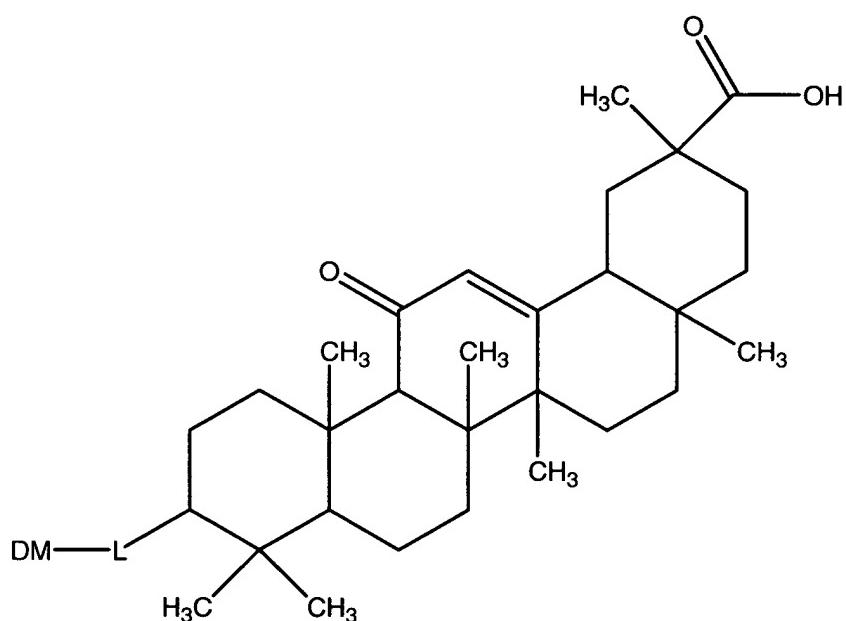
L is a straight or branched chain moiety providing between 1 and 20 atom separation between DM and the ring atom to which DM is attached.

31. A method according to claim 30 wherein detecting the probe comprises detecting a probe - target protein complex.
32. A method according to claim 30 wherein detecting the probe is performed without having to perform a separate step to remove probe that is not bound to the target protein.
33. A method according to claim 30 wherein detecting the probe is performed with the probe, target protein and test compound(s) in solution.
34. A method according to claim 30 wherein the detectable marker is a fluorescent label.
35. A method according to claim 30 wherein detecting the probe is performed by fluorescence polarization.
36. A method according to claim 30 wherein the target protein is 11 $\beta$ -hydroxysteroid dehydrogenase.
37. A method according to claim 30 wherein the method is conducted in a high throughput format.
38. A method according to claim 30 wherein the method is conducted in a multiwell plate.
39. A method according to claim 30 wherein the method further comprises determining a binding affinity of the test compound(s) for the target protein.
40. A method according to claim 30 wherein the method further comprises performing one or more control experiments where no test compounds are added and/or no target protein is added.
41. A method according to claim 30 wherein the method further comprises forming a standard curve against which results of the method from different samples may be compared.

42. A method comprising:

contacting a probe according to the present invention with a target protein to which the probe is capable of binding in the absence of test compounds;  
detecting a formation of a probe - target protein complex;  
adding one or more test compounds; and  
detecting a change in the amount of probe - target protein complex after addition of the one or more test compounds;

wherein the probe comprises the formula:



wherein

DM is a detectable marker; and

L is a straight or branched chain moiety providing between 1 and 20 atom separation between DM and the ring atom to which DM is attached.

43. A method according to claim 42 wherein detection of the probe - target protein complex and the change in the amount of probe - target protein complex after addition of the one or more test compounds is performed by fluorescence polarization.

44. A method according to claim 42 wherein detecting the formation of a probe – target protein complex comprises detecting a probe - target protein complex.
45. A method according to claim 42 wherein detecting the formation of a probe – target protein complex is performed without having to perform a separate step to remove probe that is not bound to the target protein.
46. A method according to claim 42 wherein detecting the formation of a probe – target protein complex is performed with the probe, target protein and test compound(s) in solution.
47. A method according to claim 42 wherein the detectable marker is a fluorescent label.
48. A method according to claim 42 wherein detecting the formation of a probe – target protein complex is performed by fluorescence polarization.
49. A method according to claim 42 wherein the target protein is 11 $\beta$ -hydroxysteroid dehydrogenase.
50. A method according to claim 42 wherein the method is conducted in a high throughput format.
51. A method according to claim 42 wherein the method is conducted in a multiwell plate.
52. A method according to claim 42 wherein the method further comprises determining a binding affinity of the test compound(s) for the target protein.
53. A method according to claim 42 wherein the method further comprises performing one or more control experiments where no test compounds are added and/or no target protein is added.

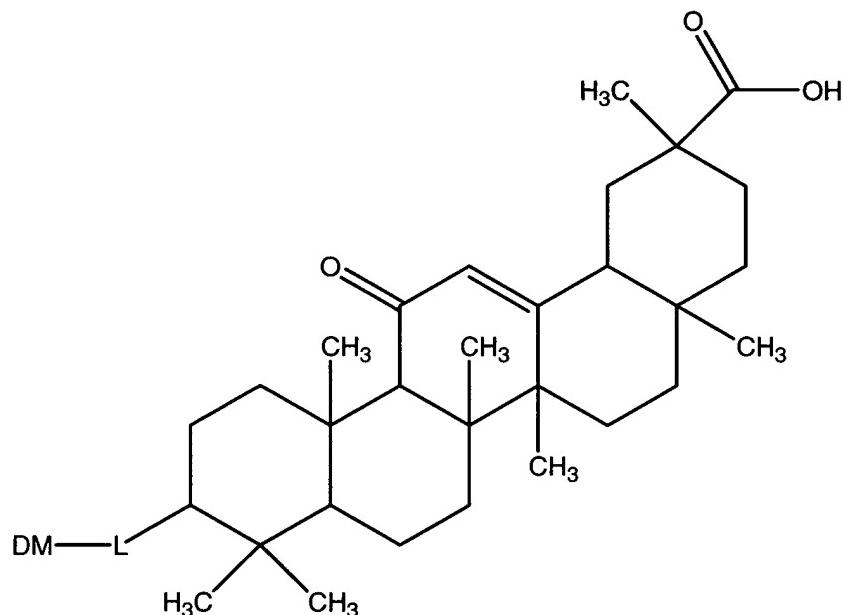
54. A method according to claim 42 wherein the method further comprises forming a standard curve against which results of the method from different samples may be compared.

55. A kit comprising:

a probe; and

a protein to which the probe is capable of binding;

wherein the probe comprises the formula:



wherein

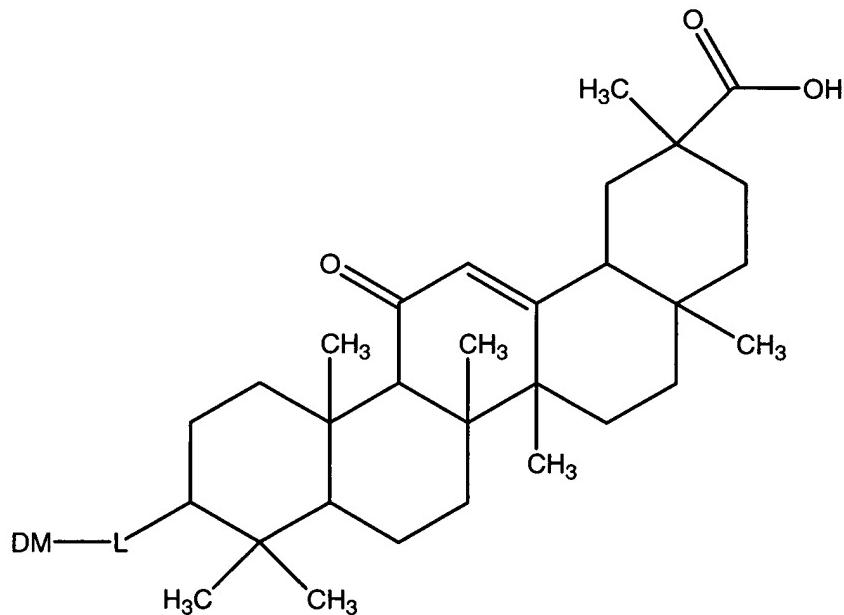
DM is a detectable marker; and

L is a straight or branched chain moiety providing between 1 and 20 atom separation between DM and the ring atom to which DM is attached.

56. A kit according to claim 55 wherein the protein is 11 $\beta$ -hydroxysteroid dehydrogenase.

57. A kit according to claim 55 wherein the kit comprises one or more modulators of the protein.

58. A kit according to claim 55 wherein the probe is in purified form.
59. A kit according to claim 55 wherein the probe is attached to a solid support.
60. A kit according to claim 55 wherein the protein is attached to a solid support.
61. A kit according to claim 55 wherein the probe and protein are in solution.
62. A kit comprising:  
a probe; and  
instructions for using the probe;  
wherein the probe comprises the formula:

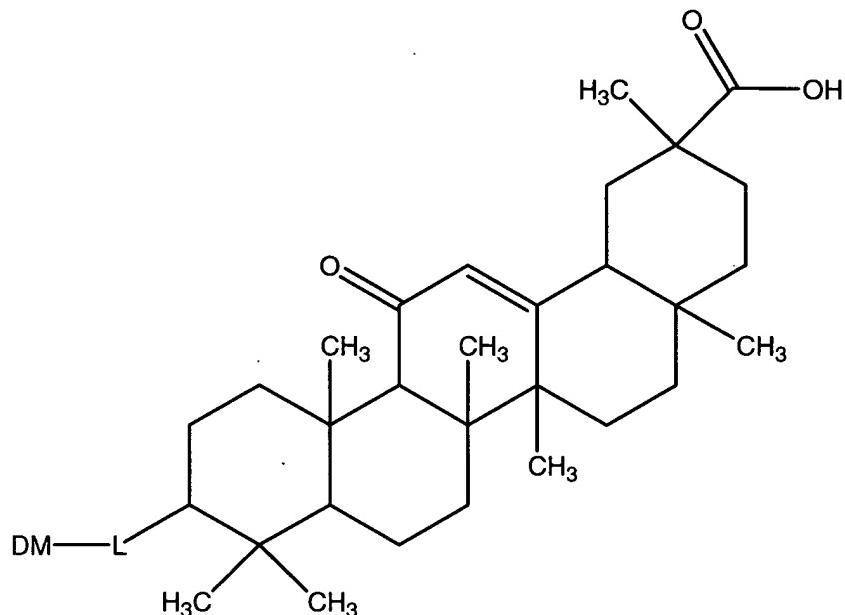


wherein

DM is a detectable marker; and

L is a straight or branched chain moiety providing between 1 and 20 atom separation between DM and the ring atom to which DM is attached.

63. A kit comprising:  
a probe; and  
packaging materials for housing a composition comprising the probe;  
wherein the probe comprises the formula



wherein

DM is a detectable marker; and  
L is a straight or branched chain moiety providing between 1 and 20 atom separation  
between DM and the ring atom to which DM is attached.